Morphological and functional anatomy of the trigeminal triangular plexus as an anatomical entity: a systematic review

Titre	Morphological and functional anatomy of the trigeminal triangular plexus as an anatomical entity: a systematic review
Type de publication	Article de revue
Auteur	Bernard, Florian [1], Mercier, Philippe [2], Sindou, Marc P [3]
Editeur	Springer
Type	Article scientifique dans une revue à comité de lecture
Année	2019
Langue	Anglais
Date	Juin 2019
Numéro	6
Pagination	625-637
Volume	41
Titre de la revue	Surgical and Radiologic Anatomy
ISSN	1279-8517
Mots-clés	Anatomy [4], Meckel cave tumors [5], Systematic review (PRISMA) [6], Triangular plexus [7], Trigeminal nerve [8], Trigeminal Neuralgia [9]
Résumé en anglais	PURPOSE: The sensory trigeminal nerve in the trigeminal cave of Meckel-which is an individualized lodge-is classically segmented into two parts: the trigeminal ganglion (TG) and the triangular plexus (TP). The TP has been defined as the portion of the trigeminal nerve from the posterior margin of the TG to the path over the upper ridge of the petrous bone. Due to its relatively unrecognized status, its morphological and functional anatomy has been reviewed by the authors through a PRISMA systematic review of the literature. METHODS: The authors have carried out a systematic review of the TP according to the PRISMA model with various bibliographical bases. Before 1947: Medic @ Library (BIU Santé Paris, 2017); Index-Catalog of the Library of the Surgeon-General's Office (US National Library of Medicine, 2017); Gallica (French National Library, 2017). After 1947: PUBMED, PubMed Central and MEDLINE. RESULTS: 56 articles were retained for full-text examination, of which 23 were chosen and included. The TP was described as having a triangular shape (30.2%), a plexual organization (97.4%) with sensory-, motor- and sympathetic-anastomoses (96.7%) that, however, respect the somatotopic trigeminal distribution (93.3%). The direct electrical stimulation of the root at the level of the TP (during radiofrequency-thermorhizotomy procedures) confirmed a clear-cut somatotopy. CONCLUSION: An understanding of both the morphological and the functional anatomy of the triangular plexus can contribute to accuracy and safety on the surgeries performed for trigeminal neuralgia and tumor removal inside the trigeminal cave.

URL de la notice	http://okina.univ-angers.fr/publications/ua19718 [10]
DOI	10.1007/s00276-019-02217-8 [11]
Lien vers le document	https://link.springer.com/article/10.1007%2Fs00276-019-02217-8 [12]
Titre abrégé	Surg Radiol Anat
Identifiant (ID) PubMed	30923840 [13]

Liens
[1] http://okina.univ-angers.fr/publications?f%5Bauthor%5D=27513
[2] http://okina.univ-angers.fr/philippe.mercier/publications
[3] http://okina.univ-angers.fr/publications?f%5Bauthor%5D=33255
[4] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=26873
[5] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=28514
[6] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=28513
[7] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=28512
[8] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=28511
[9] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=28283
[10] http://okina.univ-angers.fr/publications/ua19718
[11] http://dx.doi.org/10.1007/s00276-019-02217-8
[12] https://link.springer.com/article/10.1007%2Fs00276-019-02217-8
[13] http://www.ncbi.nlm.nih.gov/pubmed/30923840?dopt=Abstract